

Technical Data Sheet

Qr Resin QR-2005IM

Acrylonitrile Butadiene Styrene

LyondellBasell Industries

Engineering Plastics

Product Description

Available with either high or low gloss.

General

Features	<ul style="list-style-type: none"> • High Impact Resistance
Appearance	<ul style="list-style-type: none"> • Colors Available
Forms	<ul style="list-style-type: none"> • Pellets
Processing Method	<ul style="list-style-type: none"> • Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Density / Specific Gravity	1.04	1.04 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 Kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Tensile Strength (Yield)	6400 psi	44.1 MPa	ASTM D638
Flexural Modulus	340000 psi	2340 MPa	ASTM D790
Flexural Strength (Yield)	10500 psi	72.4 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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Notched Izod Impact			ASTM D256
-40°F (-40°C)	1.2 ft·lb/in	64 J/m	
73°F (23°C)	7.0 ft·lb/in	370 J/m	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
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Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed	200 °F	93.3 °C	
264 Psi (1.8 Mpa), Unannealed	185 °F	85.0 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	200 °F	93 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Drying Time, Maximum	4.0 hr	4.0 hr
Rear Temperature	370 to 410 °F	188 to 210 °C
Middle Temperature	400 to 440 °F	204 to 227 °C
Front Temperature	420 to 460 °F	216 to 238 °C
Nozzle Temperature	420 to 500 °F	216 to 260 °C
Processing (Melt) Temp	420 to 500 °F	216 to 260 °C
Mold Temperature	120 to 160 °F	49 to 71 °C

Notes

These are typical property values not to be construed as specification limits.